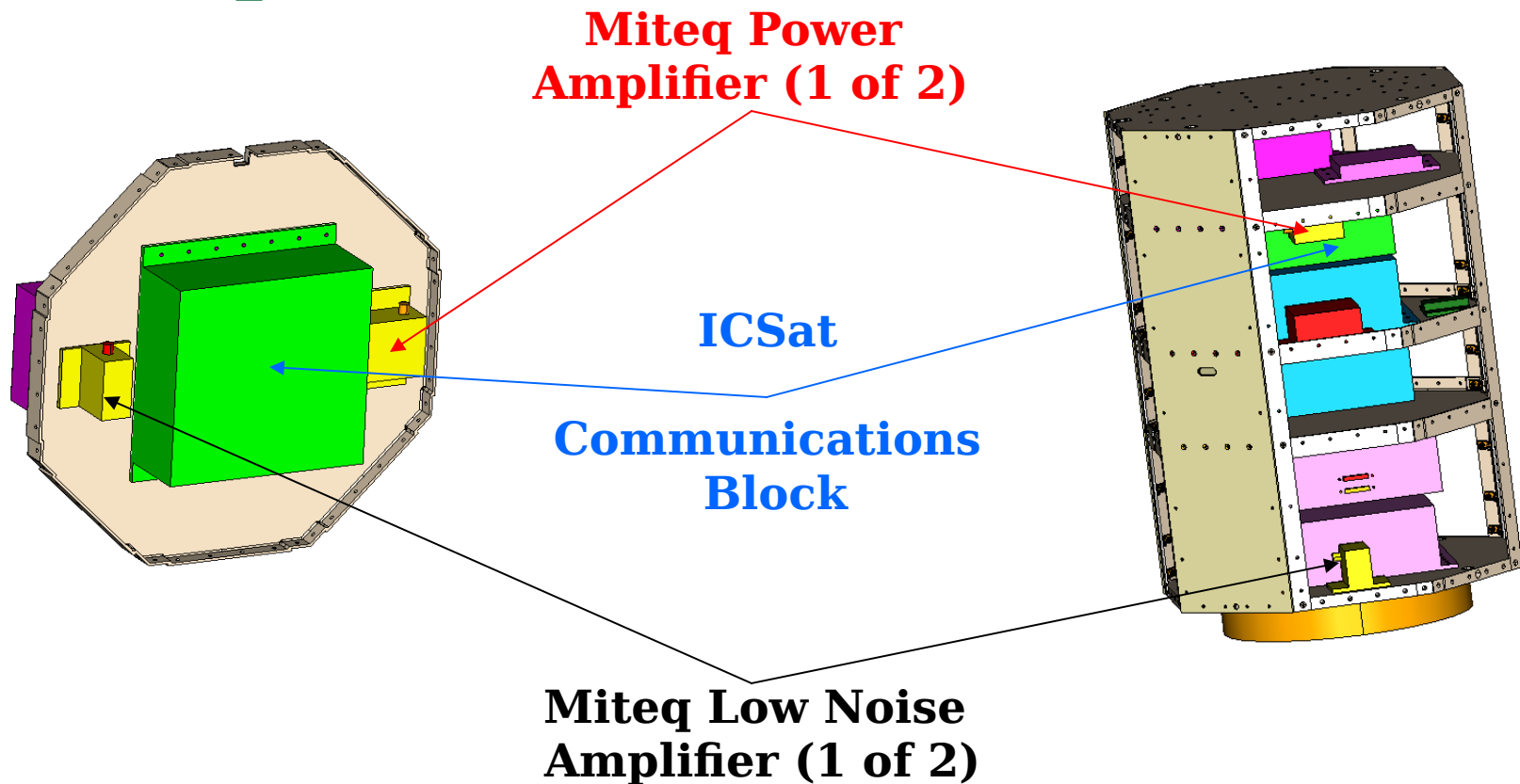


ICSat Assembly Plan



Location and Main Components

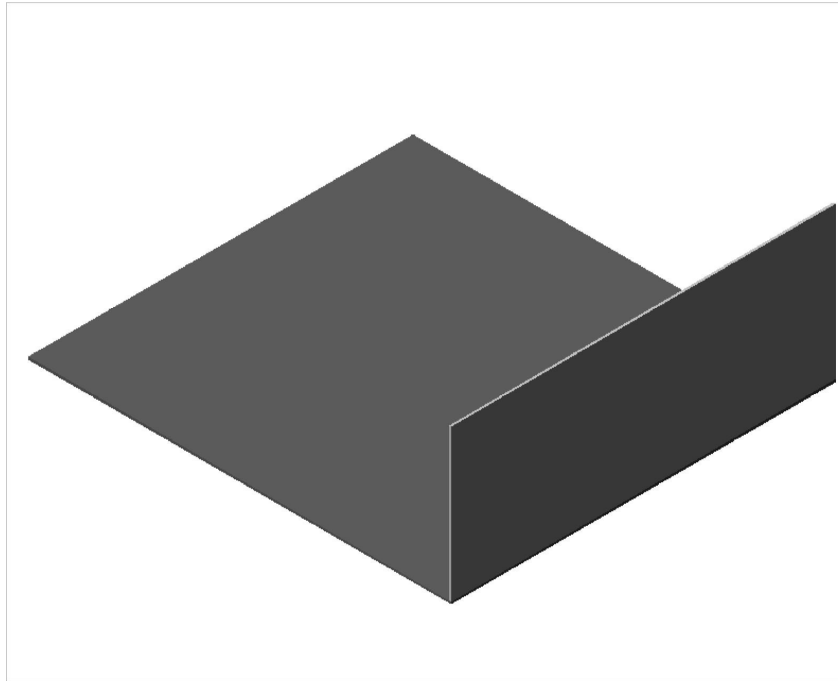


Preliminaries



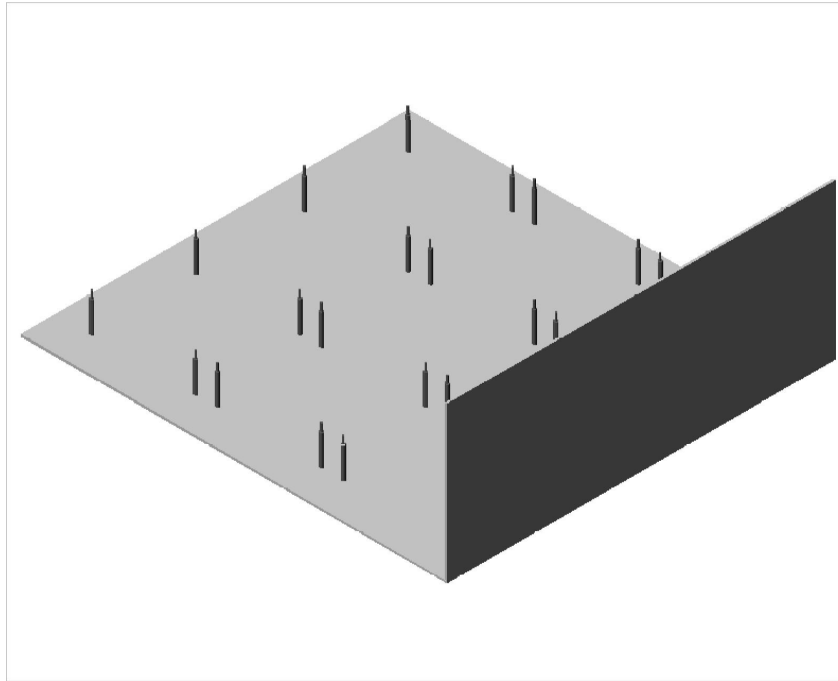
- **ICSat will be assembled in Rickover Hall at the U. S. Naval Academy using a Class 100,000 clean room.**
- **All metal decks, overheads, and bulkheads will be T6061 aluminum**
- **All +5V, +12V, and GND lines will be 14-gauge wire.**
- **The transmit and receive lines are both Coaxial cable.**

Aluminum Base plate



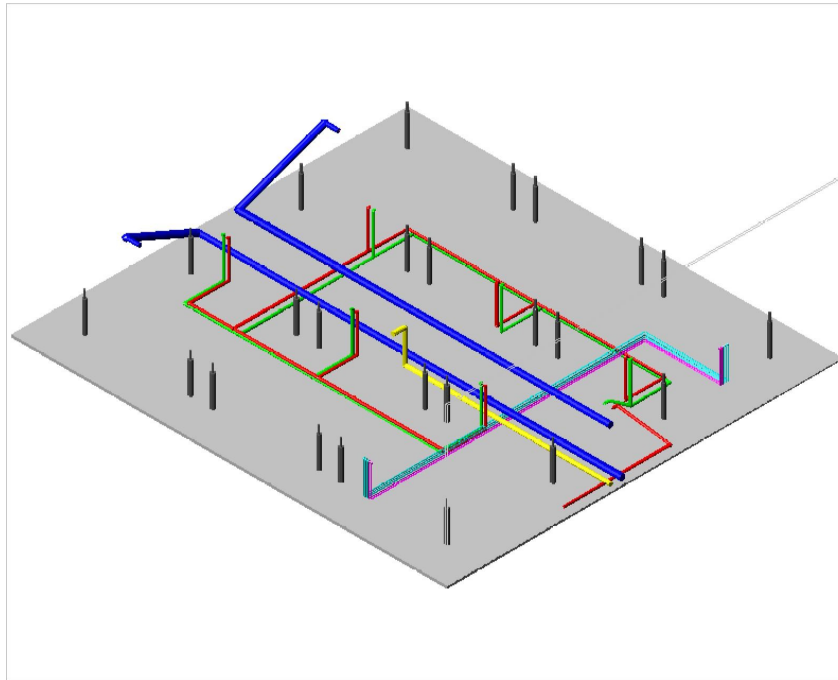
- I. 1/16" T6061 Aluminum Base plate with forward bulkhead measured 10"x11"x4".**

Securing Standoffs



- I. **Insert circuit board standoffs (24 total).**

Wire Harness Installation



i. All wiring and cabling will be cut and secured prior to circuit board installation

ii. The layering shall be, from bottom to top:

power lines (+5V, +12V, GND)

discrete signal lines

Coaxial Cable

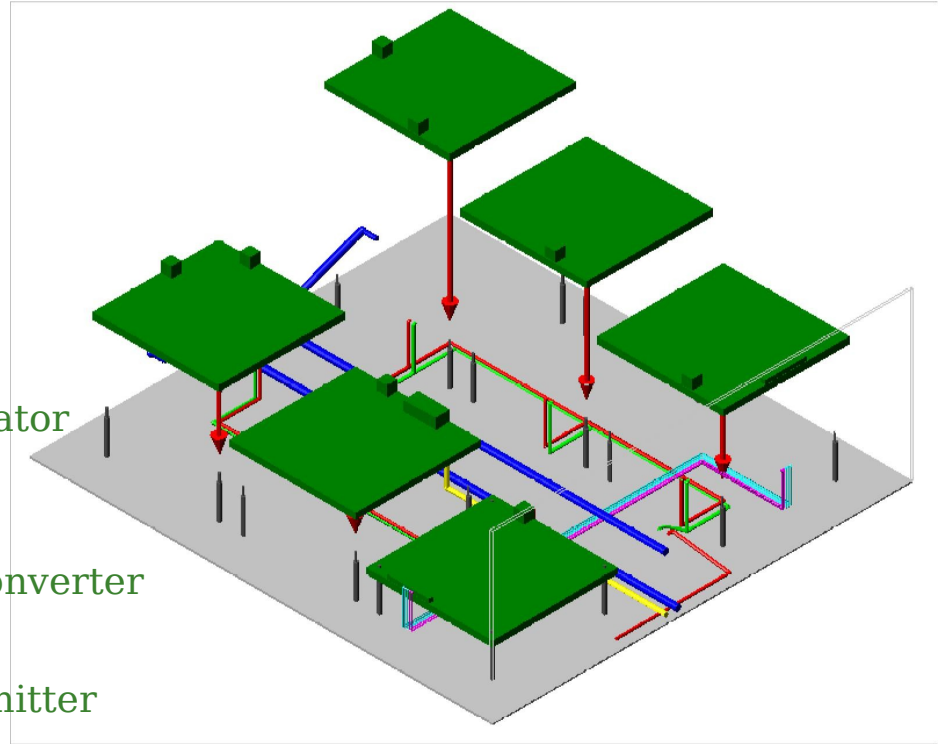
ComBlock Board Installation



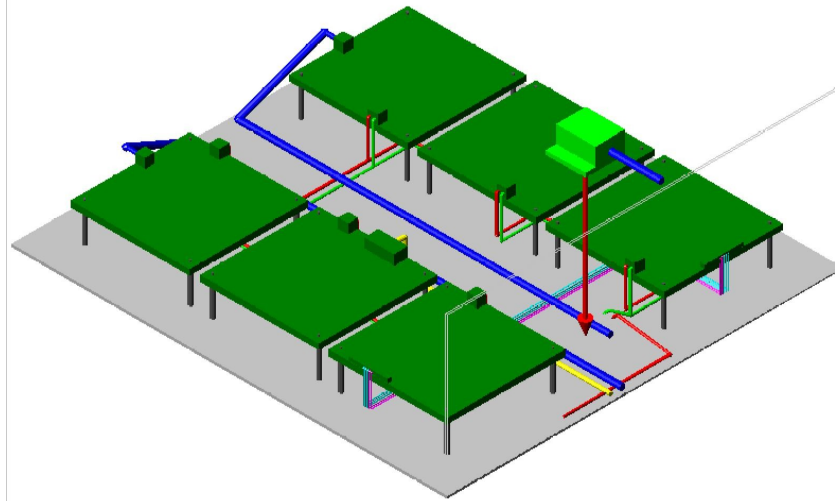
i. Printed circuit boards will be mounted in the following order:

ii. All electrical connections will be made as each board is secured to the standoff.

1. Signals/Power Conditioning and RS422 Interface
2. Demodulator
3. Receiver
4. Modulator
5. D/A Converter
6. Transmitter

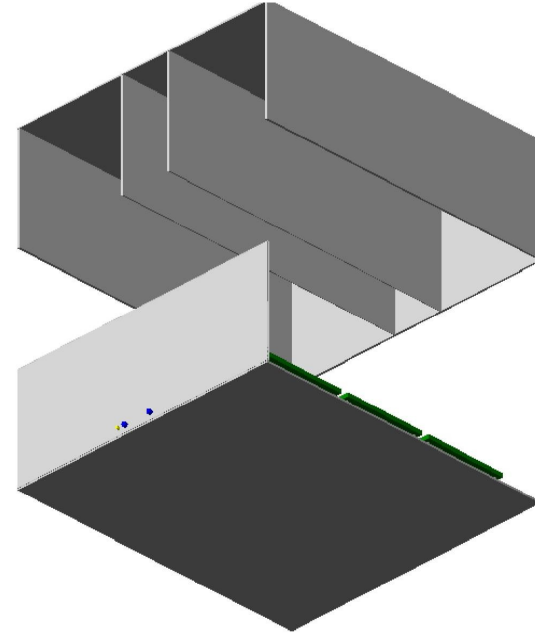
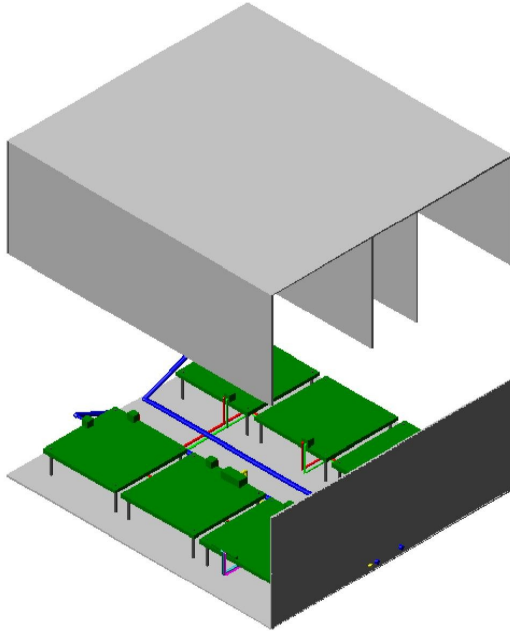


Low Power Amplifier Installation



- I. **Mount Mini-Circuits Low Power Amplifier.**

Attaching Cover Plate



- I. **T6061 Aluminum cover plate includes two interior bulkheads to dampen any possible interference.**